

Adolescent Smoking Cessation in Dental Practices

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We originally planned the current project primarily as a smoking cessation trial. We intended to enroll a limited number of susceptible never smokers partly as a pilot and partly to avoid identifying the tobacco use status of study participants. However, self-reported past 30-day smoking prevalence among adolescents surveyed (N = 1162) was only 13 percent, far less than we had expected from recent Minnesota survey data. We also encountered substantial problems in interviewing teens prior to their dental appointment.

We identified 6,031 adolescents 14 to 17 years of age who had previously scheduled routine dental hygiene visits based on a 6-month recall interval. However, only 3,845 of these adolescents scheduled a subsequent dental hygiene visit during study recruitment and only 1,162 completed a telephone survey. The primary losses from those scheduling dental visits were as follows: 357 ineligible, 330 appointment time duplicated a time slot filled by another teen who had completed an interview, 987 declined participation by post card, 312 declined by telephone, and 699 were not reached after four attempts. As a result, relatively few past 30-day smokers were available for intervention. We therefore modified our study design to include not only past 30-day smokers, but all adolescents at risk for smoking based both on the Pierce susceptibility items and on prior experimentation. Approximately 60 percent of those who completed the telephone survey were nonsusceptible never smokers.

Our final study sample was 344. We implemented a systems approach in which all subjects received brief anti-tobacco advice from dentists and dental hygienists or dental assistants. In addition, subjects randomly assigned to enhanced intervention were given motivational counseling by a study hygienist. Counseling was to include a face-to-face motivational interview at the time of the dental visit plus followup telephone support. Of 175 adolescents randomly assigned to counseling, only 115 actually received the counseling (this was due primarily to adolescents not showing up for dental appointments, canceling and not rescheduling, or not having time for the counseling session). Of the adolescents who were counseled, 67 percent received just the face-to-face motivational interview. Only 10 percent of the counseled adolescents received more than a single telephone call. Results failed to indicate a difference between study conditions either at 3- or 12-month followup. Based on intent to treat more than 90 percent of those who reported baseline past 30-day smoking were past 30-day smokers at 12 months. Reported past 30-day smoking among baseline susceptible nonsmokers in contrast was relatively low in both conditions and averaged less than 10 percent at 12-month followup. Despite the many technical and logistical challenges faced by this study, dental practices were very receptive. The study was constrained by a smaller than targeted sample size and less than optimal delivery of counseling. Given the logistical and implementation problems encountered in the current study, it would be premature to conclude that this type of intervention in dental practices is ineffective.